Macromedia CD-ROM Project Documentation

Note: All files are in Workstation01->projects->Macromedia
Some other research material, etc. is in “CDROM Archive” on Workstation04

We have been utilizing the following methods when scanning-in images for the Macromedia CD-ROM Collection images (from 5/02-8/02):

- Open Photoshop(version 6.0)
- File->Import->HP PrecisionScanPro 3.0
- Choose area to scan
- All Images:
  (see old files for naming convention)
  - ♣ master image: .tiff – the first scan with the original size
  - ♣ derivative image: .jpg – the resized thumbnail: no edge is longer than 200 pixels

  Note: all the CD-ROM thumbnail images: 160x155 pixels
- We named all the images with different names and and put them in the same folder.
- If someone planned to include the .tiff files in the website, they would have to be renamed and placed in the same folder as the thumbnails.

Cataloging:

- We scanned the covers of the boxes, manuals & CDs, entered the appropriate data into Macromedia database, copied the contents of the CD, created ISO files, and then put the CD and the agreement into an envelope. We then labeled the envelope and filed it in a the appropriately numbered NoCal box.
- Each CD took a maximum of 30 minutes considering the waiting time for copying the CD contents, creating an ISO image, and having difficulty with a foreign language. One recommendation Lucille has would be to work with multiple computers, so that this process could be more time-effecient.

Database:

(For practice on using Filemaker Pro, simply install the Filemaker Pro 4.0 and do the tutorial)

- Read the README file in the folder “database”
- The database uses Filemaker Pro 5.5. Use the “MyLayout” layout to view the database, since we have decided to catalogue only the first 23 fields in this view on the website and for our records.
- The records we entered this summer record numbers 8500-8595.
- Each CD is identified by the “CD Tag” which goes up to 00096 currently. All other CD's that were in the Macromedia database when we got it are numbered 00000.
- The first 8500 records are the three combined macromedia database files, identified w/ the CD Tag of 00000 (the original Macromedia database are in the folder “original macromedia filemaker database files recieved 6-2002”
- To automate actions, you can use scripts. Lucille Tang created two examples in the database called “CollectionAutomate” and “CDtagAutomate.”
- One of Lucille's recommendations was to enter the data in the field “Phone #” (meaning the publisher's phone number). She recommended that this be moved to the upper left and be included as one of the data fields to be be entered.
- The main categories we created in June 2002 for this collection are:
  - ♠ Education
  - ♠ Promotion
  - ♠ Entertainment
  - ♠ Training
  - ♠ Corporate
  - ♠ Collection (museum, catalog,...)
  - ♠ Government
  - ♠ Tool

♠ Nonprofit –> (as of 7/02, this not been included, but Lucille feels it should)
  - the categories should be modified as necessary (with appropriate documentation)
  - the subcategories also need to be standardized (see the Prelinger website for ideas)

● To transfer the database to the website, export the records and only the fields being used into a tab delimited file and send that file through ftp to webdev.archive.org or email to Jon Aizen <jon@archive.org>

● Note: limitations in entering data:
  - "macromedia" has to be in lower case in the Collection field
  - the category fields should not contain the character "&"
  - all entries need to have a CD Tag, but if they do not have one, use 00000

● One thing we have not done so far, is to link the images that are already in the database to the appropriate files for the website.

CD-ROM Content:

● The content of each CD was copied into a folder and zipped (this was in order to speed-up the download option on the website).

● We also created ISO files for the CD-ROMs, which will be used as a CD drive in VMware. This file can be created using the software Undisker 1.1, which is also installed on WorkStation01 (free trail ware is being used).

Remote Access:

● We decided to use ♣ VNC for now because it supports most operating systems (including Linux just in case we decided to change the server to a Linux based system, as well as Mac for some of the CD-ROMs that may only support Mac platforms). It also has a Java viewer, and is free of charge. Finally, in the test of different remote access software, VNC was the only one that did not make the mouse disappear when VMware was running. The only problem with VNC seems to be its speed – it appears to be extremely slow. We need to continue to research better products!

● The products that were tested:
  ♣ GoToMyPC – Per month charge for us, only Windows host, web browser viewer, mouse disappears when Vmware is running, speed a little faster than VNC but still very slow.
  ♣ PCAnywhere – Cost both the client and server fees, only Windows host, no web browser viewer, need installation on client side, but definitely faster than VNC.

● The products that were researched a little:
  ♣ Timbuktu – supports MacOSX
  ♣ Radmin – claims to be the fastest
  ♣ Terminal Services – used at the Mission
  ♣ LapLink
  ♣ Citrix Metaframe

We didn't look into these any further because the costs associated seemed to be very high, they were also Windows only, and/or involved client installation & licensing.

● Basically, for a simple user interface, we would like the user not to have to install or download any extra software to view and play the CD-ROMs, and based on this research, only VNC and GoToMyPC are able to access a remote desktop through a Java-based web browser.

VMware GSX Server:

● We decided to use VMware to allow multiple CD-ROMs to run on one machine. Using VMWare allows remote "playing" of a CD through multiple virtual machines that may have different x86 operating systems.

● We also are using VMware so that the CD-ROM does not have to be in the CD drive to run the CD (and that is also why we created the ISO files)..

● In order to make sure this is working properly, you would first have to test the CD ISO file on the VMware Workstation to see if the CD-ROM is compatible with VMware GSX Server.

Project Resources Recommendations by Lucille Tang:

- As for the tedious work of just entering simple data, copying the CD contents, and scanning, I would recommend you simply hire high school students who want a part time job or may even just want to volunteer (try even middle school students for volunteers).
- The number of servers will depend on the traffic. Since VMWare said probably 3-5 instances could run on one server, you can estimate from that and the number of users remotely accessing the CD-ROM at one time, to see how many servers you would need.

Overview of the Server System:

- To start the system, install VNC and VMware to the server machine.
- VMware can easily be installed and has a good amount of documentation online.
  - Each operating system that will be used need to be installed separately as a virtual machine on the VMware software.
  - While installing Win3.1, you need to partition the hard disk and then format it with FAT16 before installing the OS.
- VNC just needs a password to start the host and the host IP address (ipconfig) to start the client connection.
  - To use the Java viewer, open a web browser and type http://<host IP address>:5800, where the “00” at the end is the display number.
- If you change this to a Linux platform, simply get the Linux version of VMware and the X-based VNC server.

This document was created by Lisa Leigh & Lucille Tang in July 2002.